



Mouse anti-Rat Endothelin 1 Receptor monoclonal antibody, clone 27 (CABT-B9206)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Rat Endothelin 1 Receptor aa. 230-352
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Rat, Human, Mouse, Fly
Clone	27
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IF
Format	Liquid
Concentration	250 µg/ml
Size	50 µg
Buffer	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction Endothelin-1 (ET-1) is a potent vasoconstrictor that is secreted by vascular endothelial cells.

ET-1, ET-2, ET-3, and endothelin β are members of a family of related peptides. All are 21 amino acid peptides with two disulfide bridges. ET-1 and ET-2 differ by only two residues, while ET-3 differs from both by six residues. ET-1 and ET-2 are highly effective on vascular smooth muscle, while the effects of ET-3 are minimal. ET-1 and its precursor, big ET-1, are the primary forms present in the circulation. Circulating ET-1 plays a pathologic role in the etiology of hypertension and antagonists are utilized in the treatment of this disease. The ET-1 receptor is a seven-transmembrane-domain receptor of the G-protein-coupled family that signals via transient increases in intracellular Ca^{2+} . It is primarily expressed in lung and heart and is detected at lower levels in liver, brain, muscle, and kidney. ET-1 receptor interacts with ET-1, ET-2, and ET-3. However, it has a 2-3 fold higher affinity for ET-1 than ET-2 and the affinity for ET-3 is more than 100 fold lower. Thus, ligation of the ET-1 receptor by ET-1 induces increased intracellular Ca^{2+} that signals to promote vasoconstriction.

Keywords

EDNRA; endothelin receptor type A; ETA; ET-A; ETAR; ETRA; ETA-R; hET-AR; endothelin-1 receptor; G protein-coupled receptor; endothelin receptor subtype A; endothelin-1-specific receptor;

GENE INFORMATION

Entrez Gene ID

[1909](#)

UniProt ID

[P25101](#)
